

**UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

AVAGO TECHNOLOGIES GENERAL IP
(SINGAPORE) PTE. LTD.,

Plaintiff,

v.

ASUSTEK COMPUTER INC. and ASUS
COMPUTER INTERNATIONAL,

Defendants.

Civil Action No. 2:15-cv-239- JRG

JURY TRIAL DEMANDED

FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff AVAGO TECHNOLOGIES GENERAL IP (SINGAPORE) PTE. LTD
("Avago") files this Complaint for Patent Infringement relating to several U.S. patents as
identified below (collectively, the "Patents-in-Suit") and alleges as follows:

PARTIES

1. Plaintiff Avago is a corporation with a tax registration number 2005-12430-D
formed under the laws of the country of Singapore with its principal place of business at 1
Yishun Avenue 7, Singapore 768923.

2. Defendant ASUSTeK Computer Inc. ("ASUSTeK") is a corporation formed
under the laws of Taiwan R.O.C., with its principal place of business at No. 15, Li-Te Road,
Peitou, Taipei, Taiwan R.O.C.

3. Defendant ASUS Computer International ("ACI") is a corporation formed under
the laws of the State of California, with its principal place of business at 800 Corporate Way,
Fremont, California 94539. ACI is authorized to do business in the State of Texas and has been
assigned the Filing Number 80010147 and the Tax ID 32007164919 by the Texas Secretary of
State. ACI may be served with process by serving its registered agent, CT Corporation System,

located at 350 North St. Paul Street, Suite 2900, Dallas, Texas 75201.

4. ACI is a subsidiary of ASUSTeK. ACI and ASUSTeK (collectively, “ASUS”) acted in concert with regard to the allegations set forth in this Complaint and, therefore, the conduct described herein is fairly attributable to either or both entities.

JURISDICTION AND VENUE

5. Avago brings this civil action for patent infringement pursuant to the Patent Laws of the United States, 35 U.S.C. § 1 *et. seq.*, including 35 U.S.C. §§ 271, 281-285. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338.

6. Upon information and belief, ASUS transacts and conducts business in this District and the State of Texas, and is subject to the personal jurisdiction of this Court. Upon information and belief, ASUS has minimum contacts within the State of Texas and this District and has purposefully availed itself of the privileges of conducting business in the State of Texas and in this District by, *inter alia*, registering with and maintaining a registered agent for service of process in the State of Texas. Avago’s causes of action arise directly from ASUS’s business contacts and other activities in the State of Texas and in this District.

7. Upon information and belief, ASUS has committed acts of infringement, both directly and indirectly, within this District and the State of Texas by, *inter alia*, selling, offering for sale, importing, advertising, and/or promoting products that infringe one or more claims of the Patents-in-Suit. More specifically, ASUS, directly and/or through intermediaries, uses, sells, ships, distributes, offers for sale, or advertises and otherwise promotes its products in the United States, the State of Texas, and this District.

8. Upon information and belief, ASUS solicits customers in the State of Texas and this District, and has many customers who are residents of the State of Texas and this District who use ASUS’s products in the State of Texas and in this District.

9. Venue is proper in this district under 28 U.S.C. §§ 1391 and 1400(b).

THE PATENTS-IN-SUIT

10. On September 23, 1997, the United States Patent and Trademark Office (“USPTO”) duly and legally issued, after a full and fair examination, U.S. Patent No. 5,670,730, titled “Data Protocol and Method for Segmenting Memory for a Music Chip,” to inventors Anthony James Grewe and Kevin Alan Shelby (the “‘730 Patent”). A true and correct copy of the ‘730 Patent is attached as **Exhibit A** to this Complaint.

11. On February 9, 1999, the USPTO duly and legally issued, after a full and fair examination, U.S. Patent No. 5,870,087, titled “MPEG Decoder System and Method Having a Unified Memory for Transport Decode and System Controller Functions,” to Kwok Kit Chau (the “‘087 Patent”). A true and correct copy of the ‘087 Patent is attached as **Exhibit B** to this Complaint.

12. On February 13, 2001, the USPTO duly and legally issued, after a full and fair examination, U.S. Patent No. 6,188,835, titled “Optical Disk System and Method for Storing Data Allowing Playback of Selected Portions of Recorded Presentations,” to Brett J. Grandbois (the “‘835 Patent”). A true and correct copy of the ‘835 Patent is attached as **Exhibit C** to this Complaint.

13. On August 6, 2002, the USPTO duly and legally issued, after a full and fair examination, U.S. Patent No. 6,430,148, titled “Multidirectional Communication Systems,” to Steven Richard Ring (the “‘148 Patent”). A true and correct copy of the ‘148 Patent is attached as **Exhibit D** to this Complaint.

14. On January 3, 2006, the USPTO duly and legally issued, after a full and fair examination, U.S. Patent No. 6,982,663, titled “Method and System for Symbol Binarization,” to

Lowell Winger (the “‘663 Patent”). A true and correct copy of the ‘663 Patent is attached as **Exhibit E** to this Complaint.

15. On June 1, 2004, the USPTO duly and legally issued, after a full and fair examination, U.S. Patent No. 6,744,387, titled “Method and System for Symbol Binarization,” to Lowell Winger (the “‘387 Patent”). A true and correct copy of the ‘387 Patent is attached as **Exhibit F** to this Complaint.

16. On November 9, 1999, the USPTO duly and legally issued, after a full and fair examination, U.S. Patent No. 5,982,830, titled “Hysteretic Synchronization System For MPEG Audio Frame Decoder,” to Greg Maturi and Gregg Dierke (the “‘830 Patent”). A true and correct copy of the ‘830 Patent is attached as **Exhibit G** to this Complaint.

17. On March 10, 2015, the USPTO issued a Certificate of Correction for the ‘387 Patent. A true and correct copy of the Certificate of Correction for the ‘387 Patent is attached as **Exhibit H** to this Complaint.

18. By assignment, Avago owns all right, title, and interest in and to the Patents-in-Suit, including but not limited to the right to enforce the Patents-in-Suit and collect damages for past and future infringements.

19. At this time, Plaintiff makes no allegations of infringement directed toward any ASUS product in which a component supplied by Intel Corporation (“Intel”) itself or in combination with one or more other components satisfies (literally or under the doctrine of equivalents) one or more limitations of one or more claim(s) of any patent asserted herein. Plaintiff reserves the right to raise infringement allegations against any such products at a later date, if appropriate.

COUNT 1
(Infringement of U.S. Patent No. 5,670,730)

20. Avago incorporates by reference each and every allegation in the preceding paragraphs.

21. ASUS is making, using, offering to sell, selling and/or importing into the United States products, including but not limited to ASUS Model No. T100TAF, that infringe one or more claims of the '730 Patent.

22. Upon information and belief, ASUS had actual knowledge of the '730 Patent at least as early as August 4, 2010, and at least since that date has had actual knowledge that one or more of its products infringes one or more claims of the '730 Patent.

23. Upon information and belief, by virtue of its marketing, sales, and/or promotional activities, and with knowledge of this patent and its infringement thereof, ASUS has induced infringement of this patent by customers and/or end users of ASUS products.

24. Upon information and belief, ASUS's infringement has been, and continues to be, willful and deliberate, and has caused substantial damage to Avago.

25. The infringement of the '730 Patent by ASUS will continue unless enjoined by this Court.

26. The infringing activities by ASUS have caused and will continue to cause irreparable injury to Avago for which there exists no adequate remedy at law.

COUNT 2
(Infringement of U.S. Patent No. 5,870,087)

27. Avago incorporates by reference each and every allegation in the preceding paragraphs.

28. ASUS is making, using, offering to sell, selling and/or importing into the United

States products, including but not limited to ASUS Model No. GS751JM, that infringe one or more claims of the '087 Patent.

29. Upon information and belief, ASUS had actual knowledge of the '087 Patent at least as early as September 13, 2010, and at least since that date has had actual knowledge that one or more of its products infringes one or more claims of the '087 Patent.

30. Upon information and belief, by virtue of its marketing, sales, and/or promotional activities, and with knowledge of this patent and its infringement thereof, ASUS has induced infringement of this patent by customers and/or end users of ASUS products.

31. Upon information and belief, ASUS's infringement has been, and continues to be, willful and deliberate, and has caused substantial damage to Avago.

32. The infringement of the '087 Patent by ASUS will continue unless enjoined by this Court.

33. The infringing activities by ASUS have caused and will continue to cause irreparable injury to Avago for which there exists no adequate remedy at law.

COUNT 3
(Infringement of U.S. Patent No. 6,188,835)

34. Avago incorporates by reference each and every allegation in the preceding paragraphs.

35. ASUS is making, using, offering to sell, selling and/or importing into the United States products, including but not limited to ASUS Model No. M11BB-B07, that infringe one or more claims of the '835 Patent.

36. Upon information and belief, ASUS had actual knowledge of the '835 Patent at least as early as August 4, 2010, and at least since that date has had actual knowledge that one or more of its products infringes one or more claims of the '835 Patent.

37. Upon information and belief, by virtue of its marketing, sales, and/or promotional activities, and with knowledge of this patent and its infringement thereof, ASUS has induced infringement of this patent by customers and/or end users of ASUS products.

38. Upon information and belief, ASUS's infringement has been, and continues to be, willful and deliberate, and has caused substantial damage to Avago.

39. The infringement of the '835 Patent by ASUS will continue unless enjoined by this Court.

40. The infringing activities by ASUS have caused and will continue to cause irreparable injury to Avago for which there exists no adequate remedy at law.

COUNT 4
(Infringement of U.S. Patent No. 6,430,148)

41. Avago incorporates by reference each and every allegation in the preceding paragraphs.

42. ASUS is making, using, offering to sell, selling and/or importing into the United States products, including but not limited to ASUS Model No. T100TAF, that infringe one or more claims of the '148 Patent.

43. Upon information and belief, ASUS had actual knowledge of the '148 Patent at least as early as the filing of this Complaint, and at least since that date has had actual knowledge that one or more of its products infringes one or more claims of the '148 Patent.

44. Upon information and belief, by virtue of its marketing, sales, and/or promotional activities, and with knowledge of this patent and its infringement thereof, ASUS has induced infringement of this patent by customers and/or end users of ASUS products.

45. Upon information and belief, ASUS's infringement has been, and continues to be, willful and deliberate, and has caused substantial damage to Avago.

46. The infringement of the '148 Patent by ASUS will continue unless enjoined by this Court.

47. The infringing activities by ASUS have caused and will continue to cause irreparable injury to Avago for which there exists no adequate remedy at law.

COUNT 5
(Infringement of U.S. Patent No. 6,982,663)

48. Avago incorporates by reference each and every allegation in the preceding paragraphs.

49. ASUS is making, using, offering to sell, selling and/or importing into the United States products, including but not limited to ASUS Model No. GS751JM, that infringe one or more claims of the '663 Patent.

50. Upon information and belief, ASUS had actual knowledge of the '663 Patent at least as early as August 4, 2010, and at least since that date has had actual knowledge that one or more of its products infringes one or more claims of the '663 Patent.

51. Upon information and belief, by virtue of its marketing, sales, and/or promotional activities, and with knowledge of this patent and its infringement thereof, ASUS has induced infringement of this patent by customers and/or end users of ASUS products.

52. Upon information and belief, ASUS's infringement has been, and continues to be, willful and deliberate, and has caused substantial damage to Avago.

53. The infringing activities by ASUS have caused and will continue to cause irreparable injury to Avago for which there exists no adequate remedy at law.

COUNT 6
(Infringement of Original U.S. Patent No. 6,744,387)

54. Avago incorporates by reference each and every allegation in the preceding

paragraphs.

55. At least until March 10, 2015, ASUS was making, using, offering to sell, selling and/or importing into the United States products, including but not limited to ASUS Model No. X102BA, that infringe one or more original (uncorrected) claims of the '387 Patent.

56. Upon information and belief, ASUS had actual knowledge of the '387 Patent at least as early as September 13, 2010, and at least since that date has had actual knowledge that one or more of its products infringes one or more claims of the '387 Patent.

57. Upon information and belief, by virtue of its marketing, sales, and/or promotional activities, and with knowledge of this patent and its infringement thereof, ASUS has induced infringement of this patent by customers and/or end users of ASUS products.

58. Upon information and belief, ASUS's infringement has been, and continues to be, willful and deliberate, and has caused substantial damage to Avago.

59. The infringing activities by ASUS have caused irreparable injury to Avago for which there exists no adequate remedy at law.

COUNT 7
(Infringement of Corrected U.S. Patent No. 6,744,387)

60. Avago incorporates by reference each and every allegation in the preceding paragraphs.

61. Since March 10, 2015, ASUS has been making, using, offering to sell, selling and/or importing into the United States products, including but not limited to ASUS Model No. X102BA, that infringe one or more corrected claims of the '387 Patent.

62. Upon information and belief, ASUS had actual knowledge of the corrected '387 Patent at least as early as March 10, 2015, and at least since that date has had actual knowledge that one or more of its products infringes one or more claims of the corrected '387 Patent.

63. Upon information and belief, by virtue of its marketing, sales, and/or promotional activities, and with knowledge of this patent and its infringement thereof, ASUS has induced infringement of this patent by customers and/or end users of ASUS products.

64. Upon information and belief, ASUS's infringement has been, and continues to be, willful and deliberate, and has caused substantial damage to Avago.

65. The infringing activities by ASUS have caused and will continue to cause irreparable injury to Avago for which there exists no adequate remedy at law.

COUNT 8
(Infringement of U.S. Patent No. 5,982,830)

66. Avago incorporates by reference each and every allegation in the preceding paragraphs.

67. ASUS is making, using, offering to sell, selling and/or importing into the United States products, including but not limited to ASUS Model No. TF701T, that infringe one or more claims of the '830 Patent.

68. Upon information and belief, ASUS had actual knowledge of the '830 Patent at least as early as August 4, 2010, and at least since that date has had actual knowledge that one or more of its products infringes one or more claims of the '830 Patent.

69. Upon information and belief, by virtue of its marketing, sales, and/or promotional activities, and with knowledge of this patent and its infringement thereof, ASUS has induced infringement of this patent by customers and/or end users of ASUS products.

70. Upon information and belief, ASUS's infringement has been, and continues to be, willful and deliberate, and has caused substantial damage to Avago.

71. The infringement of the '830 Patent by ASUS will continue unless enjoined by this Court.

72. The infringing activities by ASUS have caused and will continue to cause irreparable injury to Avago for which there exists no adequate remedy at law.

PRAYER FOR RELIEF

WHEREFORE, Avago requests that judgment be entered in its favor and against ASUS as follows:

A. Entering judgment declaring that ASUS has infringed, directly and/or indirectly, literally and/or under the doctrine of equivalents, the Patents-in-Suit in violation of 35 U.S.C. § 271;

B. Issuing preliminary and permanent injunctions enjoining ASUS, its officers, agents, subsidiaries and employees, and those in privity or in active concert with them, from further activities that constitute infringement of U.S. Patent No. 5,670,730, U.S. Patent No. 5,870,087, U.S. Patent No. 6,188,835, U.S. Patent No. 6,430,148, and U.S. Patent No. 5,982,830, both within the State of Texas and across the United States;

C. Declaring that ASUS's infringement of the Patents-in-Suit is willful and deliberate pursuant to 35 U.S.C. § 284;

D. Ordering that Avago be awarded damages in an amount no less than a reasonable royalty for each asserted patent arising out of ASUS's infringement of the Patents-in-Suit, together with costs, prejudgment, and post-judgment interest;

E. Declaring this an exceptional case under 35 U.S.C. § 285 and awarding attorneys' fees and trebling of damages; and

F. Awarding Avago such other costs and further relief as the Court deems just and proper.

DEMAND FOR JURY TRIAL

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Avago demands a trial by jury on all issues so triable.

Dated: May 6, 2015

CAPSHAW DeRIEUX, LLP

/s/ S. Calvin Capshaw

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CERTIFICATE OF SERVICE

I hereby certify that the all counsel of record who are deemed to have consented to electronic service are being served this 6th day of May, 2015, with a copy of this document via the Court's CM/ECF system per Local Rule CV-5(a)(3). Any other counsel of record will be served by electronic mail, facsimile transmission and/or first class mail on this same date.

/s/ S. Calvin Capshaw

S. Calvin Capshaw